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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/987,477

11/14/2001

Toshiya Ohtake

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08/19/2003

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EXAMINER

SEFER, AHMED N

ART UNIT

PAPER NUMBER

2826

DATE MAILED: 08/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/987,477

**Applicant(s)**

OHTAKE ET AL.

**Examiner**

A. Sefer

**Art Unit**

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8 is/are allowed.
- 6) ☒ Claim(s) 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claim 9 is rejected under 35 U.S.C. 102(e) as being anticipated by Asao et al. USPN 6,195,147.

Asao et al disclose (see fig. 16, claim 11 and col. 19, lines 31-49) a method of manufacturing a polarized light reflecting element, comprising: forming an oriented film 25 on a substrate; orienting the oriented film so that liquid crystal molecules are controlled in one in-plane direction; forming a liquid crystal layer 20 having a helical structure on the oriented film; and orienting and solidifying the liquid crystal molecules in the top portion of the liquid crystal layer in substantially the same direction as the direction of orientation of the oriented film.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2826

4. Claims 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Umeda et al. US PG-Pub No. 2003/0067572 in view of Toko et al. (JP 9-61822).

Umeda et al disclose (see fig. 1, par. 0244, par. 0257 and par. 0264) a method of manufacturing a polarized light reflecting element, comprising: forming an oriented film A-1 on a substrate; orienting the oriented film; forming a first liquid crystal layer LC-1 having a helical structure on the oriented film; orienting and solidifying the top portion of the first liquid crystal layer in substantially the same direction as the direction of orientation of the oriented film; forming a second liquid crystal layer having a helical structure on the first liquid crystal layer LC-2; and orienting and solidifying the top portion of the second liquid crystal layer in substantially the same direction as the direction of orientation of the oriented film, but do not specifically disclose that liquid crystal molecules are controlled in one in-plane direction.

Toko et al. disclose (see abstract) liquid crystal molecules controlled in one in-plane direction.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the teaching of Toko et al since that would decrease visual angle dependence.

5. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umeda et al. US PG-Pub No. 2003/0067572 in view of Toko et al. (JP 9-61822).

Umeda et al disclose (see fig. 1, par. 0244, par. 0257 and par. 0264) a method of manufacturing a polarized light reflecting element, comprising: forming a first oriented film A-1 on a substrate; orienting the first oriented film; forming a first liquid crystal layer LC-1 having a helical structure on the first oriented film; orienting and solidifying the top portion of the first

Art Unit: 2826

liquid crystal layer in substantially the same direction as the direction of orientation of the first oriented film; forming a second oriented film A-2 on the first liquid crystal layer; orienting the second oriented film in substantially the same direction as the direction of orientation of the first oriented film; forming a second liquid crystal layer LC-2 on the second oriented film; and orienting and solidifying the top portion of the second liquid crystal layer in substantially the same direction as the direction of orientation of the first oriented film, but do not specifically disclose that liquid crystal molecules are controlled in one in-plane direction.

Toko et al. disclose (see abstract) liquid crystal molecules controlled in one in-plane direction.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the teaching of Toko et al since that would decrease visual angle dependence.

As to the first and second oriented films and the second liquid crystal layer are formed so that the respective refractive indexes thereof account for 95% to 1005% of the refractive index of the first liquid crystal layer recited in claim 12, the specification contains no disclosure of either the critical nature of the claimed arrangement or any unexpected results arising therefrom. Where patentability is said to be based upon particular chosen dimensions or upon another variable recited in a claim, the applicant must show that the chosen dimensions are critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

*Allowable Subject Matter*

6. Claims 1-8 are allowed.

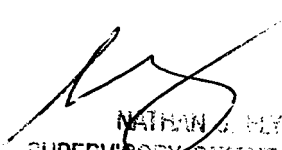
Art Unit: 2826

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (703) 605-1227.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (703) 308-6601.

ANS

July 28, 2003



NATHAN J. FLYNN  
SUPERVISORY PATENT EXAMINER  
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